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Dear Educator:

Brookhaven National Laboratory is hosting a virtual educator training, ***Exploring Proteins in a New Light***, June 28 – July 1, 2021. The training is centered on the applications in diffraction and protein crystallography and the development of student research projects at the National Synchrotron Light Source-II (NSLS-II). There is no cost to participate in the workshop. Upon completion of the training, teachers will receive 12 hours in-service credits.

High school biology, chemistry, and research teachers are invited to apply. Teachers may bring a maximum of two students to accompany them during training. Students must have completed biology and /or chemistry by the start of the workshop. Students must be 15 years at the start of the program. Alternately, teachers may participate with a colleague from their school.

To participate in the workshop the school district must have a signed user agreement with BNL. Many school districts have user agreements in place, for a sample user agreement please follow this link, https://www.bnl.gov/guv/agreements/files/pdf/NPUA-Watermark-Sample.pdf.

Exploring Proteins in a New Light

Dates: June 28 to July 1, 2021
Time: 9:00 a.m. to 12:00 p.m.
Audience: High School biology, chemistry, and research teachers
Professional Development Credit: 12 hours
Fee: none
Application deadline: May 3, 2021
Notification of selection: May 17, 2021

Learn what is happening at the new source of light at Brookhaven National Laboratory. At the National Synchrotron Light Source-II, light allows us to explore the fascinating world of atoms, molecules and cells. Virtual Lectures and laboratory activities demonstrations will introduce participants to sample preparation, data collection, and data analysis methods in protein crystallography.. One of the aims is that teachers participating in this workshop will be able to lead their students to conduct experiments or contribute to ongoing research at the National Synchrotron Light Source II.

Agenda Overview:

Lecture topics include cell structure, macromolecules, crystals, principles of synchrotron radiation, crystallography, data analysis, and developing proposals for research at the NSLS II.

Participants will gain firsthand knowledge in sample preparation, protein crystallization, imaging, data collection, and data analysis.

Sincerely,
Office of Educational Programs
Brookhaven National Laboratory